



78-MSY

6-Axis Mill/Turn Lathe with 16-Tool Turret

- + 78mm 3" Bar Capacity
- + Twin 4,000 RPM Opposed Spindles
- + 16-Driven Tool Positions each station can mount multiple tools
- + "Y" Axis with ± 1.968 " Travel
- + Full "C" Axis on Main and Sub-Spindle
- + Complete Front & Back Work



Capacity	
Turning Diameter Maximum / Standard	Ø12.2" (310 mm) / Ø8.2" (210 mm)
Center Distance	41.7" (1061mm) Between Spindle Centers
Turning Length	24.8" (630mm) Maximum
Main Spindle	
Spindle Nose / Bearing Diameter	A2-6 (Bearing Diameter 4.72" / Ø120mm)
Spindle Bar Capacity	Ø3.070" (78 mm Drawtube I.D. / 88mm Spindle Bore= 3.465")
Chuck Size Included	Ø10" (with 78mm Bore)
Spindle Center Height	40" (1,000mm)
Maximum Spindle Speed	60 - 4,000 RPM (Integral Refrigerated Spindle)
Main Spindle Motor Power 15/22Kw	30-HP (30-minute duty rating) / 20-HP (constant duty rating)
Sub-Spindle	
Spindle Nose	A2-6
Spindle Bar Capacity	Ø2.559" (65 mm drawtube I.D. / 86mm 3.386" spindle bore)
Chuck Size Included	Ø8" (with 65mm bore) (Ø10" optional)
Maximum Spindle Speed	60 - 4,000 RPM (Integral Spindle)
Main Spindle Motor Power 11/15Kw	15-HP (30-minute duty rating) / 10-HP (constant duty rating)
Live Tool Turret	
Number of Turret Stations	16 (Any combination of 16 ID, OD or Live tool stations)
Index Time (Adjacent Tool / 180° index)	0.2 seconds / 1.2 seconds High-Speed Servo Indexing
Live Power Tool/RPM 3.7/5.5 Kw	7.5-HP / 6,000 rpm, 14.75 ft. lbs. torque (20Nm)
Tool Size/Collet Size	1" (25mm) (for square tool & 32mm round tools) / ER-32 collets
Tool Holder Type & Size	BMT-65 Base Mount Tooling
B & C-Axis	
B-Axis Rapid Traverse Rate	1,573 Inch Per Minute (40m per minute)
B-Axis Travel	29.31" (744mm)
C-Axis Spindle Radial Resolution / Speed	360,000 Radial Positions with Full Contouring Capability / 600 RPM
Axis Specifications	
Axis Travel – X / Y / Z Axis	X= 9.05 / Y= ±1.968" / Z= 23.7" (230mm) / (±50mm) / (700mm)
Rapid Travers Rate – X / Y / Z Axis	630 / 236 / 1,574 ipm (16 / 6 / 40 m/minute)
Axis Motor Power	3-HP in X, Y, Z axis
Axis Continuous Thrust Rating	X = 2142, Y = 2924, Z = 1425 pounds of Thrust Force
Minimum Programmable Input	0.0001" (0.001mm = 40 millionths of an inch)
Fluid Capacity	
Hydraulic System	8-gallons (30 Liters) with 5-HP (3.5kw) Pump Motor
Dual Coolant Pumps	2x 1.7 HP Pumps for Tooling / 2 Pumps for Chip Flushing
Coolant Tank	74-gallon (280 Liters) coolant tank
Specifications	
Machine Weight	17,650lbs (8,000 kgs) - Shipping Weight 18,680 lbs. (8472kgs)
Electrical Requirement	56 KVA, 220vac ±5%, 3-phase, 60 Hz, 130 amps
Air Requirement	85-psi @ 8-cfm for Parts Catcher, Ejector, Oil Mist Lubricator
Machine Dimensions	Length 145"* / Depth 82" / Height 82" (*+44" for Chip Conveyor)
Shipping Dimensions	Length 200" / Depth 90" / Height 93"